

Tours of Volume US Mail and Electronic Mail

January 24, 2017

Mr. Jeffrey Thein
New Jersey Department of Environmental Protection
Division of Water Quality Bureau of Point Source Permitting – Region One
P.O. Box 029
Trenton, New Jersey 08625-0029

Re: Discharge Monitoring Report for December 2016
Diamond Alkali Superfund Site
Newark, New Jersey

Dear Mr. Thein:

In accordance with the New Jersey Pollutant Dischage Elimination System (NJPDES) Discharge to Surface Water (DSW) Permit Equivalent, dated May 2, 2000, for the Diamond Alkali Superfund Site in Newark, New Jersey, Tierra Solutions, Inc. (Tierra, formerly Chemical Land Hol dings, Inc.) has prepared the Discharge Monitoring Report (DMR) for the month of December 2016 (Attachment 1). Tierra is currently extracting and treating groundwater in the on-site water treatment system and directly discharging effluent to the Passaic River.

The effluent is sampled once per month and analyzed for the chemical constituents listed in the NJPDES DSW Permit Equivalent. The analytical results for each sample are validated and the constituent concentrat ions are compared against the concentration limits establish ed in the NJPDES DSW Permit Equivalent. The analytical results are representative of the effluent discharged throughout the month.

In December 2016, 74,716 gallons of groundwater wer e treated and discharged to the Passaic River. The direct discharge of treated effluent was limited to periods of high tide when the adjacent mud flats were not exposed. A flow meter was used to record the volume of treated effluent discharged to the river.

A summary of the analytical results for the Decembe 2016 treated effluent and the corresponding monthly average and daily maximum permit limit concentration for each chemical constituent is included in Attachment 2.

If you should have any questions related to the DMR, please call me at (732) 579-7586.

Two Tower Center Blvd, 10th Floor East Brunswick, NJ 08816 Sincerely,

Brian Mikucki

Bi thinks.

On behalf of Occidental Chemical Corporation

(as successor to Diamond Shamrock Chemicals Company)

Enclosures

Cc: Ms. Elizabeth Butler

New Jersey Superfund Branch – 2 Emergency and Remedial Response Division U.S. Environmental Protection Agency, Region II 290 Broadway, 20th Floor New York, New York 10007-1866

Mr. Jay Nickerson Bureau of Case Management, Site Remediation Program Mail Code 401-05F P.O. Box 420 Trenton, New Jersey 08625-0420

Glenn Springs Holdings, Inc. 5 Greenway Plaza, Suite 110 Houston, TX 77046 Attention: Juan Somoano

# **ATTACHMENt 1**

NAME	Tierra	Solutions.	Inc	(formerly
INAIVIL	Hella	SOIGHOUS.	IIIU.	(IOIIIIeII)

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10<sup>th</sup> Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

# DISCHARGE MONITORING REPORT (DMR) NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER DISCHARGE

		М	ONITORING PERIO	D		
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☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN	TITY OR LOADING	}	QUALITY OR CONCENTRATION				NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Flow	SAMPLE	74,716	7,718	GPD					0	1/30	Flow Meter
TIOW	PERMIT REQUIREMENT	NL <sup>1</sup>	NL	GFD					0	1/30	Flow Meter
Total Suspended Solids	SAMPLE				N/A	3.0 U	3.0 U	mg/l	0	1/30	Grab
Total Suspended Solids	PERMIT REQUIREMENT	7 <del>777</del>			N/A	30	50	IIIg/I	0	1/30	Grab
Total Organic Carbon	SAMPLE				N/A	1.4	1.4	ma/l	0	1/30	Grab
rotal Organic Carbon	PERMIT REQUIREMENT				N/A	NL	40	mg/l	0	1/30	Grab
Petroleum Hydrocarbons	SAMPLE				N/A	5.0 UJL 5.0	UJL	mg/l	0	1/30	Grab
red oledin riydrocarbons	PERMIT REQUIREMENT				N/A	10	15	IIIg/I	0	1/30	Grab
pH	SAMPLE				7.16	NA	8.06	SU	0	1/30	Grab
рп	PERMIT REQUIREMENT				6	NL	9	30	0	1/30	Grab
2,4,6-Trichlorophenol	SAMPLE				N/A	5.0 U	5.0 U	/1	0	1/30	Grab
2,4,0-111011010phe1101	PERMIT REQUIREMENT				N/A	115	260	– μg/l	0	1/30	Grab
2-Chlorophenol	SAMPLE				N/A	5.0 U	5.0 U	a/l	0	1/30	Grab
z-Gillolophellol	PERMIT REQUIREMENT				N/A	35	125	– μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	ER I certify under per		ent a nd all attachments were signed to assure that qualific			d · /		TELEPHON	E	DATE	E
Brian Mikucki Project Coordinator	and evaluate the ir system, or those p	nformation submitted. Based ersons directly responsible f	on my inquiry of the person or gathering the information,	or persons who me the information su	anage the bmitted is,	TUDE OF BRINCIPAL EVE	(73	2) 579-75	86 201	7 01 24	
TYPED OR PRINTED		es for submitting false infor	wledge and belief, true, accur ate, and complete. I am aware that there are or submitting false information, including the possibility of fine and imprisonment OFFICER OR AUTHORIZED AGENT						/BER	YEAR MO	DAY

**COMMENT AND EXPLANATION OF ANY VIOLATIONS** (Reference all attachments here) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 1 OF 7

#### **DISCHARGE MONITORING REPORT** (DMR)

**NAME** Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10<sup>th</sup> Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER

DISCHARGE NUMBER	

Form Approved OMB No. 2040-0004

			М	ONITORING PERIO	D		
	YEAR M	0	DAY		YEAR M	0	DAY
FROM	2016 1	2	01	то	2016 1	2	31

☐ Check here if no Discharge.

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		QUAN <sup>-</sup>	TITY OR LOADING	}	C	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
2,4-Dichlorophenol	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
2,4-Dictriol opticitor	PERMIT REQUIREMENT		<del></del>		N/A	23	150	– μg/l	0	1/30	Grab
Phenol	SAMPLE				N/A	23 U	23 U	/1	0	1/30	Grab
Filefioi	PERMIT REQUIREMENT				N/A	23	40	μg/l	0	1/30	Grab
1,2,4-Trichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
1,2,4-THCHIOTODEHZEHE	PERMIT REQUIREMENT				N/A	45	90	— μg/l	0	1/30	Grab
Hexachlorobenzene	SAMPLE	5.5E-04	7.1E-04	lbs/d	N/A	22 U	22 U	Jug/I	0	1/30	Grab
nexacilloropenzene	PERMIT REQUIREMENT	NL	16.3	ay	N/A	22	40	– μg/l	0	1/30	Grab
1,2-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	ua/I	0	1/30	Grab
1,2-Dictilorobenzene	PERMIT REQUIREMENT				N/A	40	110	– μg/l	0	1/30	Grab
1.3-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
1,5-Biomorobenzene	PERMIT REQUIREMENT				N/A	25	35	рул	0	1/30	Grab
1,4-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
1,4-Dictiloropenzene	PERMIT REQUIREMENT		-		N/A	18	45	– μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	I certify under per		nt a nd all attachments were signed to assure that qualific			d · / /		TELEPHON	E	DAT	E
Brian Mikucki Project Coordinator	and evaluate the is system, or those p	nformation submitted. Based ersons directly responsible fo	on my inquiry of the person or gathering the information,	or persons who n the information su	anage the bmitted is,	THE OF PRINCIPAL SYS	(73	32) 579-75	86 201	7 01 24	
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PAGE 2 OF 7

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Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

**FACILITY** 

East Brunswick, NJ 08816

Diamond Alkali Superfund Site

LOCATION Newark, Essex County, NJ

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PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Fluoranthene	SAMPLE				N/A	10 U	10 U	110/	0	1/30	Grab
riuorantilene	PERMIT REQUIREMENT				N/A	NL	16	— μg/l	0	1/30	Grab
Naphthalene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
Маришанене	PERMIT REQUIREMENT		100 miles		N/A	35	105	— μg/l	0	1/30	Grab
Phenanthrene	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
i nenantinene	PERMIT REQUIREMENT		-		N/A	35	105	μул	0	1/30	Grab
Benzene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
Delizerie	PERMIT REQUIREMENT		-		N/A	21	57	— μg/l	0	1/30	Grab
Chlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
Onioropenzene	PERMIT REQUIREMENT	<u></u>	-		N/A	23	45	ру/г	0	1/30	Grab
1,2-Dichloroethane	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
1,2-Diomoroculane	PERMIT REQUIREMENT		4		N/A	30	85	μ9/1	0	1/30	Grab
1,1,1-Trichloroethane	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
1,1,1-Themoreemane	PERMIT REQUIREMENT		-		N/A	25	65	— μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	R I certify under per or supervision in a		nt a nd all attachments were pigned to assure that qualifie			d · / /		TELEPHO	1E	DATE	<u> </u>
Brian Mikucki Project Coordinator	and evaluate the ir system, or those p	formation submitted. Based ersons directly responsible fo	on my inquiry of the person or gathering the information, occur ate, and complete. I	or persons who m the information su	anage the bmitted is,	- Thurbur 5		32) 579-75	86 201	7 01 24	
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NAME	nena	Solutions.	HIC.	Hormen

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent –
May 2000
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PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
1,1-Dichloroethane	SAMPLE				N/A	5.0 U	5.0 U	a/l	0	1/30	Grab
i, i-Dictioroethane	PERMIT REQUIREMENT				N/A	25	65	– μg/l	0	1/30	Grab
Chloroform	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
Ciliorolollii	PERMIT REQUIREMENT				N/A	20	40	µg/i	0	1/30	Grab
Trans-1,2-Dichloroethene	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
mans-1,2-Dictiloroethene	PERMIT REQUIREMENT				N/A	25	65	– μg/l	0	1/30	Grab
Ethyl Benzene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
Luiyi Benzene	PERMIT REQUIREMENT		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		N/A		430	– μg/l	0	1/30	Grab
Toluene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
roluene	PERMIT REQUIREMENT				N/A	18	35	μg/l	0	1/30	Grab
Trichloroethene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
Themoroethene	PERMIT REQUIREMENT				N/A	25	65	— μg/l	0	1/30	Grab
Vinyl Chloride	SAMPLE				N/A	5.0 U	5.0 U	μg/l	0	1/30	Grab
Vinyi Onlonde	PERMIT REQUIREMENT				N/A	2,5	65	μg/i	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	I certify under pen		ent a nd all attachments were signed to assure that qualific			9:1/2:		TELEPHON	Ε	DATE	
Brian Mikucki	and evaluate the in	formation submitted. Based	on my inquiry of the person for gathering the information,	or persons who m	anage the	- Imp	(73	2) 579-75	96 201	7 01 24	
Project Coordinator	to the best of my k	nowledge and belief, true, a	secur ate, and complete. I	am aware that the	ere are SIGNA	TURE OF PRINCIPAL EXE	CUTIVE `	2) 3/9-/3	00 201	V U I Z4	
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#### **DISCHARGE MONITORING REPORT** (DMR)

**NAME** Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)
Two Tower Center Boulevard

10<sup>th</sup> Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

LOCATIO FROM

ADDRESS

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER ----DISCHARGE NUMBER Form Approved OMB No. 2040-0004

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		QUANTITY OR LOADING			a	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNI TS	EX	OF ANALYSIS	TYPE
4,4-DDT	SAMPLE	8.5E-06	1.1E-05	lbs/d	N/A	0.34 U	0.34 U		0	1/30	Grab
4,4-001	PERMIT REQUIREMENT	NL	0.25	ay	N/A	NL	0.34	- μg/l	0	1/30	Grab
4,4-DDE	SAMPLE				N/A	0.35 U	0.35 U	//	0	1/30	Grab
4,4-000	PERMIT REQUIREMENT		200		N/A	NL	14	μg/l	0	1/30	Grab
Alpha-endosulfan	SAMPLE				N/A	0.050 U 0.0	50 U		0	1/30	Grab
Alpha-endosunan	PERMIT REQUIREMENT				N/A	32	90	- μg/l	0	1/30	Grab
2,4-D	SAMPLE				N/A	11 U	11 U		0	1/30	Grab
2,4-0	PERMIT REQUIREMENT	2.12			N/A	1,500	3,300	μg/l )	0	1/30	Grab
2,4-DB	SAMPLE				N/A	16 UJ	16 UJ		0	1/30	Grab
2,4-00	PERMIT REQUIREMENT				N/A	17	25	- μg/l	0	1/30	Grab
Dinoseb (DNBP)	SAMPLE				N/A	1.6 U	1.6 U	μg/l	0	1/30	Grab
Billoses (BNSI )	PERMIT REQUIREMENT				N/A	420	790	рул	0	1/30	Grab
Dioxin (2,3,7,8-TCDD)	SAMPLE	2.0E-09	2.6E-09	lbs/d	N/A 0.00	00081 U 0.000	081 U	μg/l	0	1/30	Grab
DIOXIII (2,0,7,0-10DD)	PERMIT REQUIREMENT	NL	0.00006	ay	N/A	NL	0.000081	P9/i	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	R I certify under pen		nt a nd all attachments were signed to assure that qualifie			1.	Т	ELEPHON	E	DATE	
Brian Mikucki	and evaluate the ir	formation submitted. Based	on my inquiry of the person	or persons who m	anage the	- Innhall	(722)	70.75	06 204	7 01 24	
Project Coordinator TYPED OR PRINTED	to the best of my k	nowledge and belief, true, a es for submitting false infort	or gathering the information, ocur ate, and complete. I nation, including the possibil	am aware that the	ere are SIGNA	TURE OF PRINCIPAL EXEC ICER OR AUTHORIZED AG	CUTIVE   ` '		86 201 BER	7 01 24 YEAR MO	DAY

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4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) J – Detection limit is estimated. 8) The 2,4-D result is based on the analysis of the field duplicate sample, as approved by the USEPA via email on 11/15/16, because the result from the parent sample was rejected based on MS/MSD recoveries.

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PAGE 5 OF 7

NAME	Tierra	Solutions,	Inc.	former
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Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

East Brunswick, NJ 08816
Diamond Alkali Superfund Site
Newark, Essex County, NJ

FROM

**FACILITY** 

**LOCATION** 

NJPDES DSW Permit Equivalent – May 2000
PERMIT NUMBER

	-
DISCHARGE NUMBER	
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Check here if no Discharge.

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		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUI	VI UNI	EX.	OF ANALYSIS	TYPE
Total Recoverable Antimony	SAMPLE				N/A	60 U	60 U	μg/l	0	1/30	Grab
Total Recoverable Antimony	PERMIT REQUIREMENT				N/A	200	305	pg/i	0	1/30	Grab
Total Recoverable Arsenic	SAMPLE				N/A	10 U	10 U	,,,,,//	0	1/30	Grab
Total Necoverable Alseilic	PERMIT REQUIREMENT				N/A	50	115	—— μg/l	0	1/30	Grab
Total Recoverable Beryllium	SAMPLE				N/A	8.6 U	8.6 U	,,,,,/1	0	1/30	Grab
Total Necoverable Beryllium	PERMIT REQUIREMENT		25 C C C C C C C C C C C C C C C C C C C		N/A	NL	8.6	—— μg/l	0	1/30	Grab
Total Recoverable Cadmium	SAMPLE				N/A	31 U	31 U		0	1/30	Grab
Total Necoverable Caumium	PERMIT REQUIREMENT				N/A	NL	31	— μg/l	0	1/30	Grab
Hexavalent Chromium	SAMPLE				N/A	44 U	44 U		0	1/30	Grab
riexavalent om omlum	PERMIT REQUIREMENT				N/A	NL	66	μg/l	0	1/30	Grab
Trivalent Chromium	SAMPLE				N/A	10 U	10 U	//	0	1/30	Grab
Trivalent Chromium	PERMIT REQUIREMENT	<del>-1-</del>			N/A	NL	44	µg/l	0	1/30	Grab
Total Recoverable Copper	SAMPLE				N/A	62 U	62 U	ua/l	0	1/30	Grab
	PERMIT REQUIREMENT				N/A	NL	62	μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	R I certify under per		nt a nd all attachments were signed to assure that qualific			1.		TELEPHO	NE .	DAT	Έ
Brian Mikucki	and evaluate the in	nformation submitted. Based	on my inquiry of the person or gathering the information,	or persons who m	anage the	- Imm		32) 579-7	586 201	7 01 24	
Project Coordinator	to the best of my l	mowledge and belief, true, a	ccur ate, and complete. I nation, including the possibil	am aware that the	ere are SIGNA	TURE OF PRINCIPAL EXE	CUTIVE				
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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

#### **DISCHARGE MONITORING REPORT (DMR)**

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Chemical Land Holdings, Inc.)

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Form Approved OMB No. 2040-0004

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		QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO.	FREQUENCY	SAMPLE	
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Total Recoverable Lead	SAMPLE				N/A	18 U	18 U		0	1/30	Grab
Total Recoverable Lead	PERMIT REQUIREMENT				N/A	NL	18	μg/l	0	1/30	Grab
Total Recoverable Mercury	SAMPLE				N/A	3.4 U	3.4 U	ua/l	0	1/30	Grab
Total Recoverable Mercury	PERMIT REQUIREMENT				N/A	NL	3.4	µg/l	0	1/30	Grab
Total Recoverable Nickel	SAMPLE				N/A	73 U	73 U		0	1/30	Grab
Total Recoverable Nickel	PERMIT REQUIREMENT				N/A	NL	73	μg/l	0	1/30	Grab
Total Recoverable Silver	SAMPLE				N/A	69 U	69 U	ua/!	0	1/30	Grab
Total Necoverable Sliver	PERMIT REQUIREMENT		<u></u>		N/A	NL	69	μg/l	0	1/30	Grab
Total Recoverable Zinc	SAMPLE				N/A	47 U	47 U	ua/l	0	1/30	Grab
Total Necoverable Zillo	PERMIT REQUIREMENT	-11-			N/A	NL	47	μg/l	0	1/30	Grab
Total Cyanide	SAMPLE				N/A	78 U	78 U	 - μg/l	0	1/30	Grab
rotal Gyanide	PERMIT REQUIREMENT				N/A	NL	78	μ	0	1/30	Grab
	SAMPLE				N/A						
	PERMIT REQUIREMENT				N/A					- <del>-</del> -	
			nt a nd all attachments were prize to assure that qualifie			9 . / /		TELEPHON	E	DATE	
Brian Mikucki Project Coordinator	and evaluate the in system, or those po to the best of my k	on in accordance with a system designed to assure that qualified personnel properly gatle the information submitted. Based on my inquiry of the person or persons who manage hose persons directly responsible for gathering the information, the information submitte of my knowledge and belief, true, accur ate, and complete. I am aware that there are			anage the abmitted is, are are SIGNA	age the nitted is, are SIGNATURE OF PRINCIPAL EXECUTIVE		2) 579-75	86 201	7 01 24	
TYPED OR PRINTED		nificant penalties for submitting false information, including the possibility of fine and imprisonment knowing violations.				Ment OFFICER OR AUTHORIZED AGENT			IBER	YEAR MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

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# ATTACHMENT 2

#### DECEMBER 2016 SUPPLEMENTAL TABLE FOR MONTHLY DISCHARGE MONITORING REPORT DIAMOND ALKALI SUPERFUND SITE NEWARK, NEW JERSEY

	Domniti	Limitation	Sample ID:	W-TSI- <del>ETT</del> -120116	W-TSI-ETT-DUP-120116	TB-120116-708R
	rennit	LITHAUOT	Sample Date:	12/1/2016	12/1/2016	12/1/2016
Constituent	N According	D.J.L	SDGNumber:	LISTER708R	LISTER708R	LISTER708R
	Monthly	Daily				
	Avg.	Max	Units	Effluent	Effluent Duplicate	Trip Blank
Total Suspended Solids(TSS)	30	50	mg/l	3 U	3 U	
Total Organic Carbon (TOC)	-	40	mg/l	1.3	1.4	_
Petroleum Hydrocarbons	10	15	mg/I	5.0 WL	5.0 WL	-
рH	-	6 - 9	SU	7	7.00	-
2,4,6-Trichlorophenol	115	260	μg/I	5 U	5 U	_
2-Chlorophenol	35	125	μg/I	5 U	5 U	_
2,4-Dichlorophenol	23	150	μg/I	5 U	5 U	-
Phenol	23	40	μg/I	23 U	23 U	-
1,2,4-Trichlorobenzene	45	90	μg/I	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	22	40	μg/I	22 U	22 U	_
1,2-Dichlorobenzene	40	110	μg/I	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	μg/I	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45	μg/I	5.0 U	5.0 U	5.0 U
Fluoranthene		16	μg/I	10 U	10 U	-
Naphthalene	35	105	μg/I	5 U	5 U	_
Phenanthrene	35	105	μg/I	5 U	5 U	_
Benzene	21	57	μg/I	5.0 U	5.0 U	5.0 U
Chlorobenzene	23	45	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	30	85	μg/I	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
Chloroform	20	40	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25	65	μg/I	5 U	5 U	_
trans-1,2-Dichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Ethylbenzene		430	μg/I	5.0 U	5.0 U	5.0 U
Toluene	18	35	µg/I	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25	65	μg/I	5.0 U	5.0 U	5.0 U
4,4-DDT		0.34	μg/I	0.34 U	0.34 U	_
4,4-DDE		14	µg/I	0.35 U	0.35 U	_
Endosulfan I	32	90	μg/I	0.05 U	0.05 U	_
2,4-D	1,500	3,300	µg/I	11 U	11 U	_
2,4-DB	17	25	μg/I	16 W	16 W	_
Dinoseb (DNBP)	420	790	µg/I	1.6 U	1.6 U	_
Dioxin (2,3,7,8-TCDD)		0.000081	µg/I	0.000081 U	0.000081 U	_
Total Recoverable Antimony	200	305	μg/I	60 U	60 U	_
Total Recoverable Arsenic	50	115	µg/I	10 U	10 U	_
Total Recoverable Beryllium	-	8.6	µg/I	8.6 U	8.6 U	_
Total Recoverable Cadmium		31	μg/I	31 U	31 U	_
Hexavalent Chromium		66	μg/I	44 U	44 U	_
Trivalent Chromium *		44	μg/I	10 U	10 U	_
Total Recoverable Copper		62	μg/I	62 U	62 U	_
Total Recoverable Lead	_	18	μg/I	18 U	18 U	_
Total Recoverable Mercury		3.4	μg/I	3.4 U	3.4 U	_
Total Recoverable Nickel		73	μg/I	73 U	73 U	_
Total Recoverable Silver		69	μg/I	69 U	69 U	_
Total Recoverable Zinc		47	μg/I	47 U	47 U	_
Total Cyanide		78	μg/I	78 U	78 U	_

mg/I-Milligrams/liter µg/I-Micrograms/liter SU-Standard units

<sup>---</sup> Not applicable

U-Constituent was not detected above the associated detection limit

W- The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.
WL-The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity. Low bias is indicated.

<sup>\*</sup> Trivalent Chromium Concentration is calculated based on the total and hexavalent chromium results.

#### DECEMBER 2016 MONTHLY DISCHARGE ANALYTICAL DATA SUMMARY DIAMOND ALKALI SUPERFUND SITE NEWARK, NEW JERSEY

				NEWJEROET		
	Permit L	mitation	Sample ID:	WTSI- <del>ETT</del> -120116	Monthly	Daily
Constituent	1.011111.2	i i iliadio i	SDG Number:	LISTER708R	Average <sup>(1)</sup>	Maximum
	Monthly Avg.	Daily Max	Units	Effluent	Average	IVIAXIITUTTI
Flow			GPD	_	74,716	7,718
Total Suspended Solids(TSS)	30	50	mg/I	3 U	3 U	3 U
Total Organic Carbon (TOC)	_	40	mg/I	1.4	1.4	1.4
Petroleum Hydrocarbons	10	15	mg/I	5.0 WL	5.0 WL	5.0 WL
Field pHRange (December, 2016)	_	6 - 9	SU.	6.99 - 8.06	NA	8.06
2,4,6-Trichlorophenol	115	260	μg/l	5.0 U	5.0 U	5.0 U
2-Chlorophenol	35	125	μg/I	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	23	150	μg/l	5.0 U	5.0 U	5.0 U
Phenol	23	40	μg/I	23 U	23 U	23 U
1,2,4-Trichlorobenzene	45	90	μg/I	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	22	40	μg/l	22 U	22 U	22 U
Hexachlorobenzene	_	16.3	lbs/d	NA	5.5 <b>E</b> -04	7.1E-04
1,2-Dichlorobenzene	40	110	μg/I	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	μg/I	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45	μg/I	5.0 U	5.0 U	5.0 U
Fluoranthene	-	16	μg/I	10 U	10 U	10 U
Naphthalene	35	105	μg/I	5.0 U	5.0 U	5.0 U
Phenanthrene	35	105	μg/I	5.0 U	5.0 U	5.0 U
Benzene	21	57	μg/I	5.0 U	5.0 U	5.0 U
Chlorobenzene	23	45	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	30	45 85	μg/I	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25 25	65	μg/I μg/I	5.0 U	5.0 U	5.0 U
Chloroform	20	40	μg/I μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25 25	40 65	μg/I μg/I	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	25 25	65		5.0 U	5.0 U	5.0 U
Ethylbenzene	_	430	µg/l µg/l	5.0 U	5.0 U	5.0 U
Toluene	_ 18	450 35	μg/I	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25 25	65	μg/I μg/I	5.0 U	5.0 U	5.0 U
4,4-DDT	23	0.34	μg/I μg/I	0.34 U	0.34 U	0.34 U
4,4-DOT	_	0.25	µg/i lbs/d	0.34 O NA	8.5E-06	1.1E-05
4,4-DDE	_	14	µg/I	0.35 U	0.35 U	0.35 U
Endosulfan I	32	90	μg/I	0.05 U	0.050 U	0.05 U
2,4-D	1,500	3,300	μg/I	11 U	11 U	11 U
2,4-DB	1,300	25	μg/I	16 W	16 W	16 W
Dinoseb (DNBP)	420	790	μg/I	1.6 U	1.6 U	1.6 U
Dioxin (2,3,7,8-TODD)	420	0.000081	μg/I	0.000081 U	0.000081 U	0.000081 U
Dioxin (2,3,7,6-1000)	_	0.00006	μg/i lbs/di	0.000081 0 NA	2.0E-09	2.6E-09
Total Recoverable Antimony	200	305	µg/I	60 U	60 U	60 U
Total Recoverable Arsenic	50	115	μg/I	10 U	10 U	10 U
Total Recoverable Beryllium	30	8.6	μg/I	8.6 U	8.6 U	8.6 U
Total Recoverable Cadmium	_	31	μg/I	31 U	31 U	31 U
Hexavalent Chromium	_	66	μg/I	44 U	44 U	44 U
Trivalent Chromium	<u>-</u>	44	μg/I μg/I	10 U	10 U	10 U
Total Recoverable Copper	_	<del>44</del> 62	μg/I μg/I	62 U	62 U	62 U
Total Recoverable Lead	<del>_</del>	18	μg/I μg/I	18 U	18 U	18 U
Total Recoverable Mercury	<del>-</del>	3.4	μg/I μg/I	3.4 U	3.4 U	3.4 U
Total Recoverable Nickel	_	3.4 73		3.4 U	73 U	3.4 U 73 U
Total Recoverable Silver	_	73 69	μg/I	73 U 69 U	73 U 69 U	73 U 69 U
Total Recoverable Zinc	_	47	μg/I	47 U	47 U	47 U
Total Cyanide	_	47 78	µg/l µg/l	47 U 78 U	47 U 78 U	47 U 78 U
Total Cyclifice			m3'			

CPD-Gallons perday

mg/I-Milligrams/liter

µg/I-Micrograms/liter SU-Standard units

<sup>--</sup> Not applicable

U-Constituent was not detected above the associated detection limit.

W-The material was analyzed for, but was not detected. The sample quantitation limit is an estimated puantity.

UL - The material was analyzed for, but was not debeted. The sample quantitation limit is an estimated quantity. Low bias is indicated. (1) A Monthly Average Flow value is not calculated, value presented is the actual total flow (in gallors) for the month. Monthly averages are based on 1/2 the detection limit, where applicable.

The mass loadings for hexachlorobenzene, 4,4-DDT, and 2,3,7,8-TCDD (dioxin) were calculated based on 1/2 of the detection limit.